

## **Collaborations Through the Pathogen Equivalency Committee Help Establish New and Effective Processes to Disinfect Sewage Sludge**

Bethany Acquisto

Federal Post-Doctoral Fellow/Environmental Engineer

U.S. EPA Office of Research and Development (ORD)/National Risk Management Research Laboratory – Cincinnati (NRMRL-CIN)/Technology Transfer and Support Division

(TTSD)/Technology Transfer Branch (TTB)

(513) 569-7690

acquisto.bethany@epa.gov

**Authors:** Bethany Acquisto, James E. Smith, Jr.

U.S. EPA ORD/NRMRL-CIN/TTSD/TTB

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The focus of this poster will be on the Pathogen Equivalency Committee (PEC) and how, through its collaborative efforts, it supports the U.S. Environmental Protection Agency's (U.S. EPA) requirements for sludge to be properly disinfected prior to its use on land. This is essential to control the spread of infectious diseases. The U.S. EPA created the PEC in 1985 to comply with Federal Standards for the Use or Disposal of Sewage Sludge (40 CFR 503). Subpart D of the Part 503 regulation (503D) requires sewage sludge to be disinfected before it is applied to land. In addition to delineating certain acceptable disinfection processes, the 503D regulations also contain the option to treat sewage sludge with processes deemed equivalent to those listed. The primary role of the PEC is to review proprietors' applications for process equivalencies and make recommendations to federal management as well as regional and state permitting authorities on the merits of such applications. Equivalency recommendations may have far-reaching consequences in the wastewater industry, particularly a national equivalency, because it gives the proprietor the license to market its new process across the United States. Due to the possible far-reaching consequences of its decisions, extra care was taken to assure the members of the PEC were not from like-minded institutions. This led to both intra- and inter-agency collaboration in forming the PEC. Currently, the PEC consists of nine members with representatives from across the U.S. EPA (ORD, regional offices, and the Office of Water) as well as outside the U.S. EPA (Centers for Disease Control and Prevention). The diversity of its members allows the committee to cover a wide array of expertise including bacteriology, virology, parasitology, wastewater engineering, medical and veterinary sciences, statistics, and sludge regulations. While a process is under review, the PEC works closely with the applicants to provide guidance on the data necessary to determine equivalency. To date, the PEC has recommended several processes as equivalent and innovative concepts are being brought to the attention of the PEC for equivalency on a regular basis. The PEC's thorough review of equivalency applications establishes new and effective sludge disinfection technologies to meet 503D regulations while ensuring public safety.